SUBCHAPTER L—FEDERAL LANDS HIGHWAYS

PART 970—NATIONAL PARK SERVICE MANAGEMENT SYSTEMS

Subpart A—Definitions

Subpart B—National Park Service Management Systems

AUTHORITY: 23 U.S.C. 204 and 315; 42 U.S.C. 7410 *et seq.*; 49 CFR 1.48.

SOURCE: 69 FR 9473, Feb. 27, 2004, unless otherwise noted.

Subpart A—Definitions

§ 970.100 Purpose.

The purpose of this subpart is to provide definitions for terms used in this part.

§ 970.102 Applicability.

The definitions in this subpart are applicable to this part, except as otherwise provided.

§ 970.104 Definitions.

Alternative transportation systems means modes of transportation other than private vehicles, including methods to improve system performance such as transportation demand management, congestion management, and intelligent transportation systems. These mechanisms help reduce the use of private vehicles and thus improve overall efficiency of transportation systems and facilities.

Elements means the components of a bridge important from a structural, user, or cost standpoint. Examples are decks, joints, bearings, girders, abutments, and piers.

Federal lands bridge management system (BMS) means a systematic process used by the Forest Service (FS), the Fish and Wildlife Service (FWS) and the National Park Service (NPS) for collecting and analyzing bridge data to make forecasts and recommendations, and provides the means by which bridge maintenance, rehabilitation, and replacement programs and policies may be efficiently and effectively considered.

Federal lands congestion management system (CMS) means a systematic process used by the NPS, the FWS and the FS for managing congestion that provides information on transportation system performance, and alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet Federal, State and local needs.

Federal Lands Highway Program (FLHP) means a federally funded program established in 23 U.S.C. 204 to address transportation needs of Federal and Indian lands.

Federal lands pavement management system (PMS) means a systematic process used by the NPS, the FWS and the FS that provides information for use in implementing cost-effective pavement reconstruction, rehabilitation, and preventive maintenance programs and policies, and that results in pavement designed to accommodate current and forecasted traffic in a safe, durable, and cost-effective manner.

Federal lands safety management system (SMS) means a systematic process used by the NPS, the FWS and the FS with the goal of reducing the number and severity of traffic accidents by ensuring that all opportunities to improve roadway safety are identified, considered, implemented, and evaluated, as appropriate, during all phases of highway planning, design, construction, operation and maintenance, by providing information for selecting and implementing effective highway safety strategies and projects.

Highway safety means the reduction of traffic accidents on public roads, including reductions in deaths, injuries, and property damage.

Intelligent transportation system (ITS) means electronics, communications, or information processing used singly or in combination to improve the efficiency and safety of a surface transportation system.

Life-cycle cost analysis means an evaluation of costs incurred over the life of a project allowing a comparative analysis between or among various alternatives. Life-cycle cost analysis promotes consideration of total cost, including maintenance and operation expenditures. Comprehensive life-cycle cost analysis includes all economic variables essential to the evaluation, including user costs such as delay, safety costs associated with maintenance and rehabilitation projects, agency capital costs, and life-cycle maintenance costs.

Metropolitan planning area means the geographic area in which the metropolitan transportation planning process required by 23 U.S.C. 134 and 49 U.S.C. 5303–5306 must be carried out.

Metropolitan planning organization (MPO) means the forum for cooperative transportation decision-making for the metropolitan planning area pursuant to 23 U.S.C. 134 and 49 U.S.C. 5303.

National Park Service transportation plan means an official NPS multimodal transportation plan that is developed through the NPS transportation planning process pursuant to 23 U.S.C. 204.

Operations means those activities associated with managing, controlling, and regulating highway and pedestrian traffic.

Park road means a public road, including a bridge built primarily for pedestrian use, but with capacity for use by emergency vehicles, that is located within, or provides access to, an area in the National Park System with title and maintenance responsibilities vested in the United States.

Park Road Program transportation improvement program (PRPTIP) means a staged, multi-year, multimodal program of NPS transportation projects in a State area. The PRPTIP is consistent with the NPS transportation plan and developed through the NPS planning processes pursuant to 23 U.S.C. 204.

Park roads and parkways program means a program that is authorized in 23 U.S.C. 204 with funds allocated to the NPS by the Federal Highway Administration (FHWA) for each fiscal year as provided in 23 U.S.C. 202(c) and 23 U.S.C. 204.

Parkway means a parkway authorized by Act of Congress on lands to which title is vested in the United States.

Secretary means the Secretary of Transportation.

Serviceability means the degree to which a bridge provides satisfactory service from the point of view of its users.

State means any one of the fifty States, the District of Columbia, or Puerto Rico.

Transportation facilities means roads, streets, bridges, parking areas, transit vehicles, and other related transportation infrastructure.

Transportation Management Area (TMA) means an urbanized area with a population over 200,000 (as determined by the latest decennial census) or other area when TMA designation is requested by the Governor and the MPO (or affected local officials), and officially designated by the Administrators of the FHWA and the Federal Transit Administration (FTA). The TMA designation applies to the entire metropolitan planning area(s).

Subpart B—National Park Service Management Systems

§ 970.200 Purpose.

The purpose of this subpart is to implement 23 U.S.C. 204, which requires the Secretary and the Secretary of each appropriate Federal land management agency, to the extent appropriate, to develop by rule safety, bridge, pavement, and congestion management systems for roads funded under the FLHP. These management systems serve to guide the National Park Service (NPS) in developing transportation plans and making resource allocation decisions for the PRPTIP.

§ 970.202 Applicability.

The provisions in this subpart are applicable to the NPS and the Federal Highway Administration (FHWA) that are responsible for satisfying these requirements for management systems pursuant to 23 U.S.C. 204.

§ 970.204 Management systems requirements.

(a) The NPS shall develop, establish and implement the management systems as described in this subpart. The NPS may tailor all management systems to meet the NPS goals, policies, and needs using professional engineering and planning judgment to determine the required nature and extent of systems coverage consistent with the intent and requirements of this rule. The management systems also shall be developed so they assist in meeting the goals and measures that were jointly developed by the FHWA and the NPS in response to the Government Performance and Results Act of 1993 (Pub. L. 103–62, 107 Stat. 285).

(b) The NPS and the FHWA shall develop an implementation plan for each of the management systems. These plans will include, but are not limited to, the following: Overall goals and policies concerning the management systems, each agency's responsibilities for developing and implementing the management systems, implementation schedule, data sources, and cost estimate. The FHWA will provide the NPS ongoing technical engineering support for the development, implementation, and maintenance of the management systems.

(c) The NPS shall develop and implement procedures for the development, establishment, implementation and operation of management systems. The procedures shall include:

(1) A process for ensuring the outputs of the management systems are considered in the development of NPS transportation plans and PRPTIPs and in making project selection decisions under 23 U.S.C. 204;

(2) A process for the analysis and coordination of all management system outputs to systematically operate, maintain, and upgrade existing transportation assets cost-effectively;

(3) A description of each management system;

(4) A process to operate and maintain the management systems and their associated databases; and

(5) A process for data collection, processing, analysis and updating for each management system.

(d) All management systems will use databases with a geographical reference system that can be used to geolocate all database information.

(e) Existing data sources may be used by the NPS to the maximum extent possible to meet the management system requirements.

(f) The NPS shall develop an appropriate means to evaluate the effectiveness of the management systems in enhancing transportation investment decision-making and improving the overall efficiency of the affected transportation systems and facilities. This evaluation is to be conducted periodically, preferably as part of the NPS planning process.

(g) The management systems shall be operated so investment decisions based on management system outputs can be considered at the national, regional, and park levels.

§ 970.206 Funds for establishment, development, and implementation of the systems.

The Park Roads and Parkways program funds may be used for development, establishment, and implementation of the management systems. These funds are to be administered in accordance with the procedures and requirements applicable to the funds.

§ 970.208 Federal lands pavement management system (PMS).

In addition to the requirements provided in § 970.204, the PMS must meet the following requirements:

(a) The NPS shall have PMS coverage of all paved park roads, parkways, parking areas and other associated facilities, as appropriate, that are funded under the FLHP.

(b) The PMS may be utilized at various levels of technical complexity depending on the nature of the transportation network. These different levels may depend on mileage, functional

classes, volumes, loading, usage, surface type, or other criteria the NPS deems appropriate.

(c) The PMS shall be designed to fit the NPS goals, policies, criteria, and needs using the following components, at a minimum, as a basic framework for a PMS:

(1) A database and an ongoing program for the collection and maintenance of the inventory, inspection, cost, and supplemental data needed to support the PMS. The minimum PMS database shall include:

(i) An inventory of the physical pavement features including the number of lanes, length, width, surface type, functional classification, and shoulder information;

(ii) A history of project dates and types of construction, reconstruction, rehabilitation, and preventive maintenance. If some of the inventory or historic data is difficult to establish, it may be collected when preservation or reconstruction work is performed;

(iii) Condition data that includes roughness, distress, rutting, and surface friction (as appropriate);

(iv) Traffic information including volumes and vehicle classification (as appropriate); and

(v) Data for estimating the costs of actions.

(2) A system for applying network level analytical procedures that are capable of analyzing data for all park roads, parkways and other appropriate associated facilities in the inventory or any subset. The minimum analyses shall include:

(i) A pavement condition analysis that includes roughness, distress, rutting, and surface friction (as appropriate);

(ii) A pavement performance analysis that includes present and predicted performance and an estimate of the remaining service life (performance and remaining service life to be developed with time); and

(iii) An investment analysis that:

(A) Identifies alternative strategies to improve pavement conditions;

(B) Estimates costs of any pavement improvement strategy;

(C) Determines maintenance, repair, and rehabilitation strategies for pavements using life-cycle cost analysis or a comparable procedure;

(D) Provides for short and long term budget forecasting; and

(E) Recommends optimal allocation of limited funds by developing a prioritized list of candidate projects over a predefined planning horizon (both short and long term).

(d) For any park roads, parkways and other appropriate associated facilities in the inventory or subset thereof, PMS reporting requirements shall include, but are not limited to, percentage of roads in good, fair, and poor condition.

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§ 970.210 Federal lands bridge management system (BMS).

In addition to the requirements provided in § 970.204, the BMS must meet the following requirements:

(a) The NPS shall have a BMS for the bridges which are under the NPS jurisdiction, funded under the FLHP, and required to be inventoried and inspected as prescribed by 23 U.S.C. 144.

(b) The BMS shall be designed to fit the NPS goals, policies, criteria, and needs using, as a minimum, the following components:

(1) A database and an ongoing program for the collection and maintenance of the inventory, inspection, cost, and supplemental data needed to support the BMS. The minimum BMS database shall include:

(i) Data described by the inventory section of the National Bridge Inspection Standards (23 CFR part 650, subpart C);

(ii) Data characterizing the severity and extent of deterioration of bridge elements;

(iii) Data for estimating the cost of improvement actions;

(iv) Traffic information including volumes and other pertinent information; and

(v) A history of conditions and actions taken on each bridge, excluding minor or incidental maintenance.

(2) A system for applying network level analytical procedures that are capable of analyzing data for all bridges in the inventory or any subset. The minimum analyses shall include:

(i) A prediction of performance and estimate of the remaining service life of structural and other key elements of each bridge, both with and without intervening actions; and

(ii) A recommendation for optimal allocation of limited funds through development of a prioritized list of candidate projects over predefined short and long term planning horizons.

(c) The BMS may include the capability to perform an investment analysis as appropriate, considering size of structure, traffic volume, and structural condition. The investment analysis may:

(1) Identify alternative strategies to improve bridge condition, safety and serviceability;

(2) Estimate the costs of any strategies ranging from maintenance of individual elements to full bridge replacement;

(3) Determine maintenance, repair, and rehabilitation strategies for bridge elements using life cycle cost analysis or a comparable procedure;

(4) Provide short and long term budget forecasting; and

(5) Evaluate the cultural and historical values of the structure.

(d) For any bridge in the inventory or subset thereof, BMS reporting requirements shall include, but are not limited to, percentage of non-deficient bridges.

§ 970.212 Federal lands safety management system (SMS).

In addition to the requirements provided in § 970.204, the SMS must meet the following requirements:

(a) The NPS shall have an SMS for all transportation systems serving NPS facilities, as appropriate, funded under the FLHP.

(b) The NPS shall use the SMS to ensure that safety is considered and implemented, as appropriate, in all phases of transportation system planning, design, construction, maintenance, and operations.

(c) The SMS shall be designed to fit the NPS goals, policies, criteria, and needs and shall contain the following components: (1) An ongoing program for the collection, maintenance and reporting of a data base that includes:

(i) Accident records with details for analysis such as accident type, using standard reporting descriptions (e.g., right-angle, rear-end, head-on, pedestrian-related), location, description of event, severity, weather and cause;

(ii) An inventory of safety appurtenances such as signs, delineators, and guardrails (including terminals);

(iii) Traffic information including volume, speed, and vehicle classification, as appropriate.

(iv) Accident rates by customary criteria such as location, roadway classification, and vehicle miles of travel.

(2) Development, establishment, and implementation of procedures for:

(i) Routinely maintaining and upgrading safety appurtenances including highway-rail crossing warning devices, signs, highway elements, and operational features, where appropriate;

(ii) Identifying and investigating hazardous or potentially hazardous transportation elements and systems, transit vehicles and facilities, roadway locations and features;

(iii) Establishing countermeasures and setting priorities to address identified needs.

(3) A process for communication, coordination, and cooperation among the organizations responsible for the roadway, human, and vehicle safety elements;

(d) While the SMS applies to appropriate transportation systems serving NPS facilities funded under the FLHP, the extent of system requirements (e.g., data collection, analyses, and standards) for low volume roads may be tailored to be consistent with the functional classification of the road and number and types of transit and other vehicles operated by the NPS.

§ 970.214 Federal lands congestion management system (CMS).

(a) For purposes of this section, congestion means the level at which transportation system performance is no longer acceptable due to traffic interference. For portions of the NPS transportation system outside the boundaries of TMAs, the NPS shall:

(1) Develop criteria to determine when a CMS is to be implemented for a specific transportation system; and

(2) Have CMS coverage for all transportation systems serving NPS facilities that meet minimum CMS needs criteria, as appropriate, funded through the FLHP.

(b) The NPS shall consider the results of the CMS when selecting congestion mitigation strategies that are the most time efficient and cost effective and that add value (protection/rejuvenation of resources, improved visitor experience) to the park and adjacent communities.

(c) In addition to the requirements provided in §970.204, the CMS must meet the following requirements:

(1) For those NPS transportation systems that require a CMS, in both metropolitan and non-metropolitan areas, consideration shall be given to strategies that promote alternative transportation systems, reduce private automobile travel, and best integrate private automobile travel with other transportation modes.

(2) For portions of the NPS transportation system within transportation management areas (TMAs), the NPS transportation planning process shall include a CMS that meets the requirements of this section. By agreement between the TMA and the NPS, the TMA's CMS coverage may include the transportation systems serving NPS facilities, as appropriate. Through this agreement(s), the NPS may meet the requirements of this section.

(3) If congestion exists at a NPS facility within the boundaries of a TMA, and the TMA's CMS does not provide coverage of the portions of the NPS transportation facilities experiencing congestion, the NPS shall develop a separate CMS to cover those facilities. Approaches may include the use of alternate mode studies and implementation plans as components of the CMS.

(4) A CMS will:

(i) Identify and document measures for congestion (e.g., level of service);

(ii) Identify the causes of congestion;

(iii) Include processes for evaluating the cost and effectiveness of alternative strategies;

(iv) Identify the anticipated benefits of appropriate alternative traditional and nontraditional congestion management strategies;

(v) Determine methods to monitor and evaluate the performance of the multi-modal transportation system; and

(vi) Appropriately consider strategies, or combinations of strategies for each area, such as:

(A) Transportation demand management measures;

(B) Traffic operational improvements;

(C) Public transportation improvements;

(D) ITS technologies; and

(E) Additional system capacity.

PART 971—FOREST SERVICE MANAGEMENT SYSTEMS

Subpart A—Definitions

Subpart B—Forest Highway Program Management Systems

AUTHORITY: 23 U.S.C. 204, 315; 42 U.S.C. 7410 *et seq.*; 49 CFR 1.48.

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Subpart A—Definitions

§971.100 Purpose.

The purpose of this subpart is to provide definitions for terms used in this part.

§971.102 Applicability.

The definitions in this subpart are applicable to this part, except as otherwise provided.